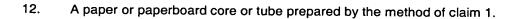
Claims

- A method for preparing a paper or paperboard core or tube comprising bonding together one or more plies of paper or paperboard material with a water-based adhesive and drying the adhesive with radio frequency.
- 2. The method of claim 1 wherein the core or tube is a single ply core or tube.
- 3. The method of claim 1 wherein the core or tube is a multi-ply core or tube.
- 4. The method of claim 1 wherein the core or tube is a consumer core or tube.
- 5. The method of claim 1 wherein the core or tube is an industrial core or tube.
- 6. The method of claim 1 wherein the core or tube is used in the tissue, towel, carpet, textile, plastic film, paper, food or industrial storage industry.
- 7. The method of claim 6 wherein the tube is a tubular container.
- 8. The method of claim 6 wherein the tubular container is a food container.
- 9. The method of claim 1 wherein the adhesive is applied to the ply material as the core or tube is wound, the wound core or tube is passed through a radio frequency field, and the core or tube is cut to a desired length.
- 10. The method of claim 5 wherein the tube is a concrete column forming tube.
- 11. The method of claim 10 wherein the concrete column forming tube comprises from about 10 to about 30 plies.



- 13. The core or tube of claim 12 which is a multi-ply core or tube.
- 14. The tube of claim 13 which is a food container.
- 15. The tube of claim 13 which is a concrete column forming tube.
- 16. An apparatus for manufacturing a core or tube comprising a radio frequency unit.
- 17. The apparatus of claim 16 wherein the radio frequency unit is located adjacent to a cutting station.
- 18. The apparatus of claim 17 wherein the radio frequency unit is located before the cutting station.
- 19. The apparatus of claim 16 wherein the radio frequency unit has an emission frequency of from about 40.02 to 40.98 MHz.
- 20. The apparatus of claim 16 wherein plies of paper or paperboard are helically wound.